

S/135/61/000/002/009/012
A006/A001

AUTHOR: Voshchanov, K. P., Engineer

TITLE: Repair of the Front Traverse of a Horizontal 5,000-Ton Press

PERIODICAL: Svarochnoye proizvodstvo, 1961, No. 2, pp. 35-36

TEXT: The front traverse of a horizontal press is a 44-ton cast part made of steel which contains: 0.34% C; 0.32-0.37% Si; 0.66-0.68% Mn; 0.04% S and 0.025% P. After four years of operation, four 350 - 590 mm long cracks were revealed on the internal surfaces of the central bushing located in the corners of the rectangular apertures in (Fig. 1). The sole means of repairing the cracks was welding-up by heating the traverse to 450°C and by subsequent heating to 650°C for stress elimination. Repair by this technology was extremely difficult due to the fact that the spots to be welded were located inside the traverse where the welding operator was not able to work at the given temperature. Therefore a special furnace was developed for the heating, welding and heat treating of the traverse (Fig. 2). The furnace, consisting of a metal carcass with refractory brick lining, was mounted around the traverse which was placed on a refractory shield on the shop floor. The furnace walls were 500 mm thick. The heating coils were located



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in special horizontal grooves along the vertical furnace walls. Normal work conditions inside the traverse were established by introducing a special hollow two-wall water-cooled aluminum screen with apertures at the spots to be welded; outside a ventilator was placed which pulling the air through the central aperture, exhausted the gases formed during welding and produced a cold air flow. To eliminate the defects of the operation assembly of the traverse, it was intended to reinforce its central portion by welding 135 mm thick "35st." steel inserts into the rectangular apertures. The cracks and insert edges were chamfered with gas cutters by heating the traverse to 150°C. The inserts were placed on backing plates and fastened to the chamfered edges of the cracks. First the cracks and then the inserts were welded-up with d-c of reverse polarity using YOИИ-13/55 (UONI-13/55) electrode bundles and a ПСМ-1000 (PSM-1000) generator. The gap was filled by the cascade method by multi-layer seams. During welding, the seams were peened with a pneumatic chisel by specially trained locksmiths. About 120 kg of metal were built up on each crack. Subsequently the traverse was tempered at 650°C for 3 hours to eliminate internal stresses. After the intermediate heat treatment, the temperature was reduced to 450 - 420°C and the steel inserts were welded into the apertures, by a system shown in Figure 4. The traverse was then subjected to

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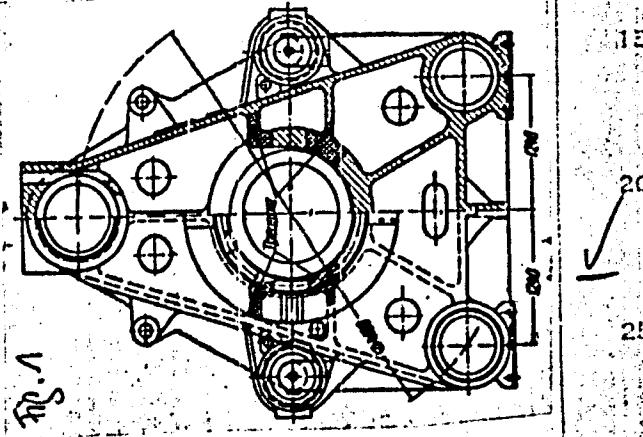
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final high-temperature tempering at 650°C and to cooling in the furnace during four days. The furnace was then removed. A control of the traverse did not reveal any inadmissible deformations or changes in dimensions. The repaired traverse has been operating normally for 12 months.

Figure 1:

Figure 1
General view of a 5,000-ton press traverse. The dotted lines show the location of cracks in the corners of the technological apertures.



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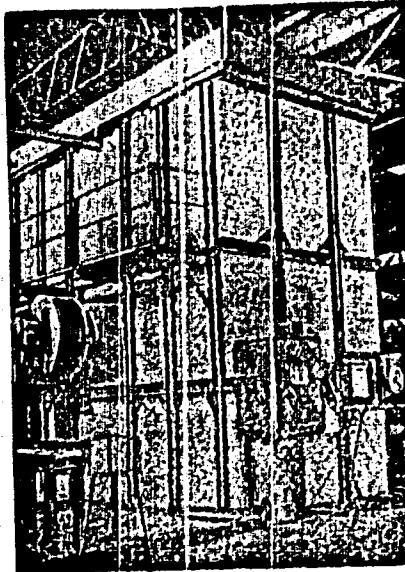
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Figure 2

General view of a furnace from the side of the exhaust fan.

Figure 2:



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Figure 3

Schematic representation of mounting the inserts on backing strips:

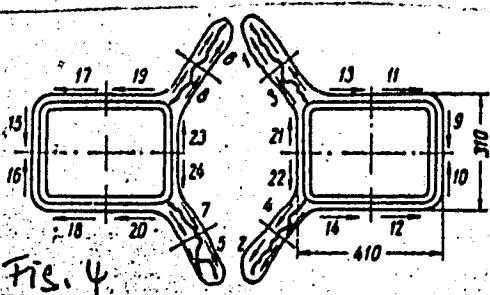


Fig. 4

Figure 4
Schematic drawing of welding-up cracks and welding-in the patches. The figures indicate the sequence, and the arrows the direction of welding.

There are 4 figures.

ASSOCIATION: Tsentral'nyye eksperimental'nyye svarochnyye masterskiye VNIIAVTOGEN
Card 5/5 (VNIIAVTOGEN Central Experimental Welding Shops)

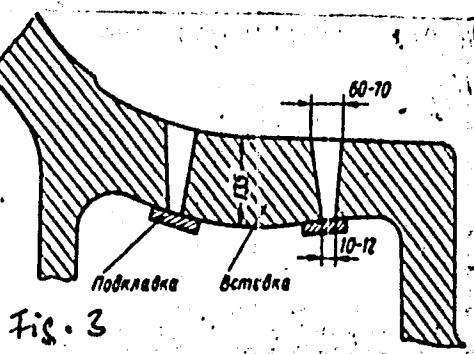


Figure 4

YOSHCHANOV, Konstantin Pavlovich; KIRILLOV, Ivan Ivanovich;
CHERNYAK, V.S., nauchnyy red.; SAZIKOV, M.I., red.;
DORODNOVA, L.A., tekhn. red.

[Machines and apparatuses for the flame machining of
metals; an album] Mashiny i apparatura dlja gazoplamen-
noi obrabotki metallov; al'bom. Moskva, Proftekhizdat,
1963. 122 p. (MIRA 16:8)

(Gas welding and cutting—Equipment and supplies)
(Flame hardening—Equipment and supplies)

VOSHCHANOV, K.P., inzh.

Exchange of experience acquired in the welding of cast iron.
Svar. proizv. no.6:21-22 Je '63. (MIRA 16:12)

VOSHCHANOV, K.P.; YEGERMAN, B.G.

Volunteer-staffed University of the Scientific Technological Society of the Machinery Industry for increasing the qualifications of welding engineers and technicians. Svar.proizv. no.1:41-42 Ja '62. (MIRA 15:3)

1. Predsedatel' Metodicheskogo soveta zaochnykh kursov usovershenstvovaniya inzhenerno-tehnicheskikh rabotnikov po tekhnologii i oborudovaniyu svarochnogo proizvodstva pri Obshchestvennom universitete Nauchno-tehnicheskogo obshchestva mashinostroitel'noy promyshlennosti (for Voshchanov). 2. Direktor Obshchestvennogo universiteta Nauchno-tehnicheskogo obshchestva mashinostroitel'noy promyshlennosit (for Yegerman).

(Welding—Study and teaching)

VORONTSOVA, Ye.I., doktor med.nauk; KARACHAROV, T.S., inzh.;
VOSHCHANOV, K.P., inzh.

Labor conditions and their improvement in the electric welding
of aluminum and aluminum alloys. Svar. proizv. no.9:33-36
S '61. (MIRA 14:8)

1. Institut gigiyeny truda i profzabolevaniy AMN SSSR (for
Vorontsova, Karacharov). 2. TSentral'nyye eksperimental'nyye
svarochnyye masterskiye Vsesoyuznogo nauchno-issledovatel'skogo
instituta avtogennoy obrabotki metallov (for Voshchanov).

(Aluminum—Welding)
(Welding—Hygienic aspects)

VOSHCHANOV, K.P., inzh.; VOLODIN, V.S., kand.tekhn.nauk

Consultations on readers' letters. Svar. proizv. no.3:48 Mr
'62. (MIRA 15:2)

1. TSentral'nyye eksperimental'nyye svarochnyye masterskiye
Vsesoyuznogo nauchno-issledovatel'skogo instituta avtogennoy
obrabotki metallov (for Voshchanov). 2. Goskomitet Soveta
Ministrov SSSR po avtomatizatsii i mashinostroyeniyu (for
Volodin).

(Welding)

VOSHCHANOV, K.P., inzh.; NIFONTOV, T.Ye., inzh.; GUZOV, S.G., kand.
tekhn. nauk

Consultations on readers' letters. Svar. proizv. no.1:47-
48 Ja '64. (MIRA 17:1)

1. TSentral'nyye eksperimental'nyye svarochnyye masterskiye
Vsesoyuznogo nauchno-issledovatel'skogo instituta avtogennoy
obrabotki metallov (for Voshchanov). 2. Leningradskiy
metallichесkiy zavod im. XXII s"yezda Kommunisticheskoy
partii Sovetskogo Soyuza (for Nifontov). 3. Vsesoyuznyy
nauchno-issledovatel'skiy institut avtogennoy obrabotki
metallov (for Guzov).

VOSHCHANOV, Konstantin Pavlovich; KLEBANOV, G.N., kand. tekhn. nauk,
red.; SOBOLEVA, G.N., red. izd-va; SMIRNOVA, G.V., tekhn. red.

[Stories about welding]Rasskazy o svarke. Moskva, Mashgiz,
143 p. (MIRA 15:10)

(Welding)

VOZNICH'UYO, N.

Trade-Unions

Recording of collective agreements. V pom. profaktivu, No. 3, 1952.

Monthly List of Russian Accessions, Library of Congress, March 1952. Unclassified.

VOVNOMY, N.

Labor Contract

Recording of collective agreements. V pom.profaktivu No. 3, 1952.

Monthly List of Russian Accessions, Library of Congress, March 1952. Unclassified.

NESHUMOV, B.V., kand.iskusstvoved.nauk; KOSHELEV, A.Ye., arkitektor;
ASTROVA, T.Ye., arkitektor; SHIKHEYEV, V.N., arkitektor;
YOSHCHANOVА, G.K., arkitektor; GORBUNOVА, V.A., arkitektor;
KOVAL'KOV, V.G., arkitektor; MARKEYEV, Yu.S., arkitektor;
YAVOROVSKAYA, M.E., arkitektor; OGRYZKO, P.V., arkitektor;
TIKHONOVА, N.V., arkitektor; MANANNIKOVА, L.V., arkitektor;
GRADOV, G.A., red.; PAVLENKO, M.V., red.

[Furniture and equipment for public buildings; catalog based
on materials from the Exhibition of Furniture and Equipment
for Public Buildings, 1959-1960] Mebel' i oborudovanie dlia
obshchestvennykh zdanii; katalog sostavlen po materialam
vystavki mebeli i oborudovaniia dlia obshchestvennykh zdanii,
1959-1960 gg. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i
stroit.materialam, 1960. 186 plates. (MIRA 14:2)

1. Akademiya stroitel'stva i arkitektury SSSR. Institut
obshchestvennykh zdaniy i sooruzheniy. 2. Chlen-korrespondent
Akademii stroitel'stva i arkitektury SSSR (for Gradov).
(Furniture--Catalogs) (Public buildings--Equipment and supplies)

BLAGOVIDOV, D.F.; VOSHCHANOV, N.P. (Moskva)

Cases of retroperitoneal phlegmons. Khirurgiia 37 no.3:108-110
(MIRA 14:3)
Mr '61. (RETROPERITONEAL SPACE—DISEASES) (PHLEGMON)

VOSHCHANOV, N.P., kand. med. nauk; SHISHKIN, S.S. (Moskva)

Prevention of repeated myocardial infarcts. Klin. med. 40 no.11:
58-62 N'62 (MIRA 16:12)

VOSHCHANOV, N.P.

Tuberculosis of the pancreas. Klin.med., Moskva no.3:75-77
(CML 19:2)
Mr '50.

1. Of the Pathologico-Anatomic Institut imeni Academician
A.I.Abrikosov (Scientific Director -- Prof. L.M.Shabad,
Corresponding Member AMS) of the Hospital imeni Botkin.

VOSCHANOV^A, N. P.

VOSCHANOV^A N. P.

Eksperimental'nomorfologicheskie issledovaniia leikosa myshch.
/Experimental morphological study of leukemia in mice/
Arkh. pat., Moskva 12:3 May-June 50

1. Of the Laboratory of Oncology (Head—Corresponding Member AMS USSR Prof. L. M. Shabad) of the Institute of Normal and Pathological Morphology (Director Academician A. I. Abrikosov of the Academy of Medical Sciences USSR, Moscow.

CLIL 19, 5, Nov. 1950

VCSHCHANVA, N. P.

"Experimental-Morphological Investigation of Leukosis in Mice (Certain Problems of Pathological Anatomy and Pathogenesis)." Sub 30 Jan 51, Central Inst for the Advanced Training of Physicians.

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55.

BULAVINTSEVA, Vera Ivanovna; VOSHCHANOV, Nina Pavlovna; DEKHTYAR',
Ye.G., red.; BUKOVSKAYA, N.A., tekhn. red.

[Precancer diseases of the stomach and the role of dis-
pensary service in their detection and treatment] Predra-
kovye zabolевания желудка и роль диспансеризации в их
выявлении и лечении. Москва, Изд-во "Медицина," 1964.
(MIRA 17:3)
94 p.

KAZANTSEVA, M.N., prof.; VOSHCHANOV, N.P. (Moskva)

Isolated myocarditis in children. Sov. med. 27 no.3:6-9 Mr '64.
(MIA 17:11)

ANDREYEV, V.Ye.; SHISHOV, Ye.L., retsenzent; VOSHCHECHUK, A.F.,
retsenzent; FEDOROV, A.M., otv. red.

[Sinking vertical piles with simultaneous erection of
tower pile drivers] Prokhodka vertikal'nykh stvolov s
odnovremennym sooruzheniem bashennykh koprov. Moskva,
Nedra, 1964. 60 p. (MIRA 17:12)

VOSHCHENCHUK, A.F.

VOSHCHENCHUK, A.F. (g. Khar'kov)

S.E.Rozenberg's book "Maintenance cost for mines with wood
timbering" Reviewed by A.F.Voshchenchuk. Ugol' 30 no.7:46-
47 Jl'55. (MIRA 8:10)
(Mine timbering) (Rozenberg, S.E.)

VOSCHENKO, A. V.

Verifying the geometric axis of the shell of a rotary kiln by
means of a transit. TSegment 20 no.6:23 N-D '54. (MLRA 8:3)

1. Amvrosiyevskiy tsementnyy zavod No.1.
(Kilns, Rotary)

VOSHCHENKO, B.I., inzh.; MERKULOVICH, V.A., inzh.

Mixing soil with binders and aggregates by the D-396 and D-445
ground-crushing and mixing machines. Stroili dor.mashinostr.
4 no.10:16-17 0 '59. (MIRA 13:2)
(Roads, Soil-cement)

VOSHCHENKO, B.I., inzh.

Control of evenness in mixing soil and bitumen. Avt.dor. 22
no. 6129 Je '59. (MIR 12:9)
(Bituminous materials)

VOSHCHENKO, B.I., inzh.

Studying operations of the D-272 road milling cutter. Stroi, i
dor.mashinostr. 3 no.11:22 N '58. (MIRA 11:11)
(Road machinery)

YOSHCHENKO, B.I., inzh.; GUSHCHIN, V.D., inzh.; MARYSHEV, B.S., inzh.

Characteristics of the work of the D-530 road cutter in soil
stabilization. Avt. dor. 27 no.2:20-21 F '64. (MIRA 17:3)

VOSHCHENKO, B.I.

Distribution of binders in the soil processed in mixing machines.
Avt.dor. 21 no.10:7-8 0 '58. (MIRA 11:11)
(Binding materials) (Mixing machinery)

VOSHCHENKO, B.I., kand.tekhn.nauk

Evaluating the mixing capacity of a road-cutting machine
by the characteristics of the preparation of combined
sandy loam on the roadbed. Avt.dor.i dor.stroi. no.1:52-
60 '65. (MIRA 18:11)

VOSHCHENKO, B.I., inzh.; MEREKULOVICH, V.A., inzh.

Using mixing machinery for crushing soil. Stroi, 1 dor. mashinestr.
4 no. 11:21-23 N '59 (MIRA 13:3)
(Road machinery)

VOSHCHENKO, B.I., inzhener.

Mixing soil and binding materials with the D-272 cutter. Stroili dor.
mashinostro. 2 no.3:10-11 Mr '57. (MLRA 10:5)
(Mixing machinery) (Road machinery)

VOSHCHENKO, F.F.

With our Rumanian friends. Energetik 7 no.3:31-32 Mr '59.
(MIRA 12:4)
(Rumania—Hydroelectric power stations)

SOV/91-59-3-14/22

14(6)

AUTHOR: Voshchenko, F.F.

TITLE: Labor Union Activities (Profsoyuznaya zhizn') -
With Our Rumanian Friends (U nashikh rumyanskikh
druzey)

PERIODICAL: Energetik, 1959, Nr 3, pp 31-32 (USSR)

ABSTRACT: In 1958, builders of the Stalingrad hydro-electric
plant (Stalingradskaya gidroelektrostantsiya) ex-
changed delegations with the Bicaz hydro-electric
plant imeni V.I. Lenin in the Rumanian People's Re-
public. The Rumanian delegation consisted of the
secretary of the Bicaz Party Committee, Mr. Gheorghe
Condrea, Deputy Chairman of the Building Committee,
Mr. Gheorghe Marchian, Member of the Building Commit-
tee, Engineer Marin Manalache, Engineer Mihai Horcea
from the Concrete Plant, and the leader of Concrete
Team, Mr. Alexandru Velcu. In addition to visiting
the construction site of the Bicaz hydro-electric
plant, the Soviet delegation visited many places

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Labor Union Activities - With Our Rumanian Friends

during its 2-week stay, including Bucureşti and Constanţa. The construction works of the Bicaz hydroelectric plant located on the Bistriţa River in Carpathian Mountains, were started in 1950 and will be finished by 1961. The storage lake will have a capacity of 1,230,000,000 cu meters; the total output of six turbogenerators will amount to 210,000 kw. In addition, a number of hydro-electric plants are planned to be built in a series on the Bistriţa River.

Card 2/2

VOSHCHERENKO, V., polkovnik, sud'ya respublikanskoy kategorii

In a sharp struggle. Kryl. rod. 15 no.11:11 N '64.

(MIRA 18:3)

VOSHCHENKO, V., mayor; LAPIN, Yu, kapitan.

Morning physical exercises. Vest.Vozd.F1. 34 no.10:52-54 0 '51.
(Physical education and training, Military) (MLEA 8:3)

VOSHCHENKO, Z. S.

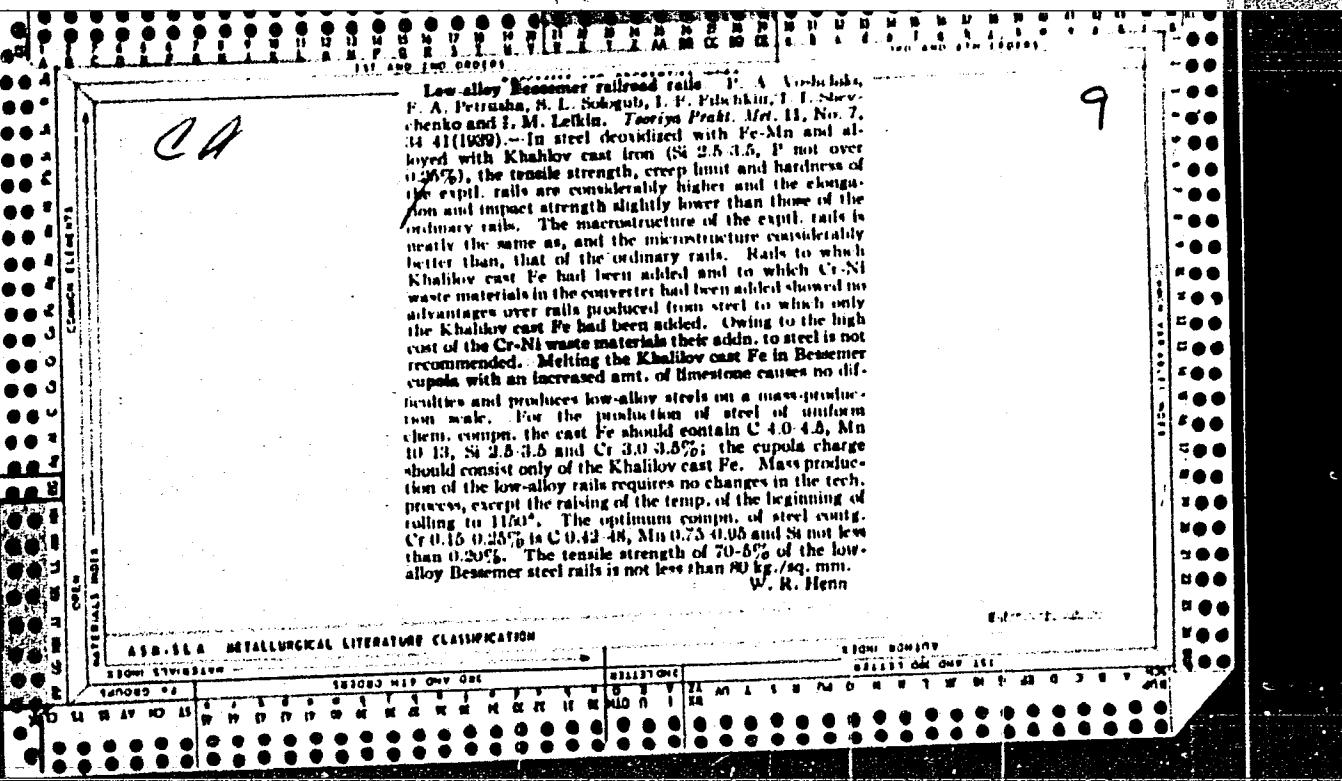
Voshchenko, Z. S. and Perlina, A. M. "Soft waters in municipal economy and living conditions," San. Tekhnika, Issue 2, 1948, p. 19-44

SO: U-2888, Letopis Zhurnal'nykh Statey, No. 1, 1949

VOSHCHEV, G.P.

Antiskid systems for diesel locomotives need improvement.
Elekt. i tepl. tiaga 5 no.10:38 O '61. (MIRA 14:10)

1. Pomoshchnik mashinista teplovoza depo Gudermes Severo-Kavkazskoy dorogi.
(Diesel locomotives--Equipment and supplies)



117 440 240 000001

Production of low-alloy Bessemer-steel rails in the Dzerzhinsk plant. P. A. Vashchilo, P. A. Petrushev, S. I. Sokolov, I. P. Filikhin, I. I. Shevchenko and I. M. Lefkin. *Tsvyaz Prakt. Mat.* 11, No. 10-11, 70-3 (1939). cf. *C. A.* 35, 5437.—The mech. and metallurgical properties of rails produced from 0.3-0.6% Cr steel were better than those of steels lower in Cr. Steel contg. Cr 0.4-0.6 and C not below 0.41% produces rails with a tensile strength of not less than 80 kg./sq. m. In spite of the high tensile strength the hardness of the rails is satisfactory even with a C content of 0.50%. The impact resistance at -20° is not less than that of ordinary rails. At normal temps. the impact resistance is slightly lower. A considerably greater impact resistance was obtained in rails to which Al had also been added and in rails contg. little Cr and deoxidized with ferrotitanium. The macrostructure of Cr-steel rails is considerably better than that of ordinary rails. The rails should contain not less than 0.44% C. The mech. properties of steels to which ferrochrome had been added in the cupola were better than those to which ferrochrome had been added directly to the converter. Best results are obtained from Khalilov cast Fe contg. C 4.0-4.5, Mn 10.0-12.5, Si 2.5-3.5, Cr 5.5-7.5 and P not over 0.28%. The optimum compn. of Cr rail steel is C 0.44-0.50, Mn 0.70-0.90, Si 0.20-0.30 and Cr 0.40-0.60%. W. R. Henn

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ASH-364 METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001861020009-4"

VOSHCHILIN, A.A.; SIMONERKO, P.I.

Organization of rapid drifting. Ugol' Ukr. 4 no.8:38
(MIRA 13:9)
Ag '60.

1. Shakhtoupravleniye No.10 im. Volodarskogo.
(Donets Basin--Coal mines and mining)

VOSHCHILKO, M.Ye.

Wild black currants in regions of the Salair Ridge. Biul.Glav.bot.sad
no.52:103-105 '64. (MIRA 17:4)

1. TSentral'nyy sibirskiy botanicheskiy sad Sibirskogo otdeleniya
AN SSSR, Novosibirsk.

VOSHCHININ, A., inzh.

The MAI motorboat. Za rul. 20 no.9:29 S '62. (MIRA 15:9)
(Motorboats)

VOSHCHININ, A., inzh.

The third speed potentiality. Za rul. 20 no.1:29-30 Ja '62.
(MIRA 15:2)
(Motorboats)

~~SECRET~~ VOSHCHEININ, A.I.

SOKOLOV, K.M.; YEVSTAFEEV, S.V.; ROSTOTSKIY, V.K.; STANKOVSKIY, A.P.;
VARENIK, Ye.I.; ONUFRIYEV, I.A.; SVESHNIKOV, I.P.; UKHOV, B.S.;
BAUMAN, V.A.; BARSOV, I.P.; BASHINSKIY, S.V.; BOYKO, A.G.; VALUTSKIY,
I.I.; ZAPOL'SKIY, V.P.; ZOTOV, V.P.; IVAROV, V.A.; KAZARIKOV, V.M.;
LEVVI, S.S.; MALOLETKOV, Ye.K.; MERENKOV, A.S.; MIROPOL'SKAYA, N.K.;
OSIPOV, L.G.; PEREL'MAN, L.M.; PETROV, G.D.; PETROV, N.M.; POLYAKOV,
V.I.; VATSSLAVSKAYA, L.Ya.; VAKHRAZEEV, S.A.; VERZHITSKIY, A.M.;
VLAZOV, P.A.; VOL'FSOHN, A.V.; YOSHCHININ, A.I.; DZHUNKOVSKIY, N.N.;
DOMBROVSKIY, N.G.; YEFIFAROV, S.P.; YEFREMENKO, V.P.; ZELICHENOK, G.G.;
ZIMIN, P.A.; POPOVA, N.T.; ROGOVSKIY, L.V.; REBROV, A.S.; SAPRYKIN, V.A.;
SOVALOV, I.G.; SOSHIN, A.V.; STARUKHIN, N.M.; SURENYAN, G.S.; TOLORAYA,
D.F.; TROITSKIY, Kh.L.; TUSHNYAKOV, M.D.; FROLOV, P.T.; TSIRKUNOV, I.P.

Andrei Vladimirovich Konorov; obituary. Mekh. stroi. 16 no.1:32 Ja
'59. (MIRA 12:1)

(Konorov, Andrei Vladimirovich, 1890-1958)

VOSHCHININ, A. I.

VOSHCHININ, A. I. -- "CONTROL OF TWISTING MOMENTS AND SPEED OF ROTATION OF SHAFTS OF TURBGEARING ON BUILDING CONSTRUCTION AND HIGHWAY-BUILDING MACHINES." SUB 5 MAR 52, INST OF MACHINE SCIENCE, ACADEM SCI USSR (DISSERTATION FOR THE DEGREE OF DOCTOR IN TECHNICAL SCIENCES)

SO: VECHERNAYA MOSKVA, JANUARY-DECEMBER 1952

VOSCHININ, A. L.

LAPIDUS, Viktor Iosifovich, kandidat tekhnicheskikh nauk; PETROV,
Vyacheslav Aleksandrovich, kandidat tekhnicheskikh nauk; OSTROVTSOV,
A.N., kandidat tekhnicheskikh nauk, retsenzent; VOSCHININ, A. L.,
doktor tekhnicheskikh nauk, redaktor; BAUMAN, I.M., redaktor
izdatel'stva; UVAROVA, A.F., tekhnicheskiy redaktor

[Hydraulic transmission for automobiles] Gidravlicheskie transmissii
avtomobilei. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit.
lit-ry, 1957. 383 p. (MLRA 10:5)
(Automobiles--Transmission devices)

VOSHCHININ, A.I., kandidat tehnicheskikh nauk.

Turbine transmission for construction winches. Mekh.stroi. 4
no.12:9-14 D 147. (MLRA 9:3)
(Winches)

VOSHCHININ, A.I., kandidat tekhnicheskikh nauk.

Modern concrete conveyors; automatic concrete mixers and
dischargers. Mekh.stroi. 4 no.6:8-12 Je '47. (MLRA 9:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut Streydermash.
(Mixing machinery)

VOSCHCHININ, A.I., kandidat tekhnicheskikh nauk.

Turbo-transmission as applied to excavating machinery. Mekh.stroi.
4 no.5:15-19 My '47. (MLRA 9:2)

1.Vsesoyuznyy nauchno-issledovatel'skiy institut Stroydormash.
(Excavating machinery--Transmission devices)

VOSHCHININ, A.I., kandidat tekhnicheskikh nauk; ZELENSKIY, Yu.S., inzhener.

Annular grinders for construction materials. Mekh.stroi. 4 no.4:
16-21 Ap '47. (MLRA 9:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut otdela stroitel'-nogo i dorozhnogo mashinostroyeniya.
(Milling machinery)

VOSHCHININ, A.I., kandidat tekhnicheskikh nauk.

New machine for unloading cement from closed freight cars.
Mekh.stroi. 4 no.3:16-19 Mr '47. (MLRA 9:2)

1.Vsesoyuznyy nauchno-issledovatel'skiy institut Stroydormash.

(Loading and unloading)

SEMICHASTNOV, Ivan Fedorovich, kandidat tekhnicheskikh nauk, dotsent;
SHISHKIN, K.A., professor, retsenzent; YOSHCHININ, A.I., doktor
tekhnicheskikh nauk, professor, retsenzent; BLIZNYANSKIY, A.S.,
inzhener, redaktor; MATVEYEVA, Ye.H., tekhnicheskiy redaktor;
SOKOLOVA, T.F., tekhnicheskiy redaktor

[Hydraulic transmissions in diesel locomotives] Otdravlicheeskie
peredachi teplovozov. Moskva, Gos. nauchno-tekhn. izd-vo mashino-
stroit. lit-ry, 1956. 191 p. (MLRA 9:10)

(Hydraulic transmission)
(Diesel locomotives--Transmission devices)

VOSCHININ, A.I.

[Hydraulic and pneumatic equipment for building and road construction machinery] Gidravlicheskie i pnevmaticheskie ustroistva na stroitel'nykh i dorozhnykh mashinakh. Moskva, Mashgiz, 1954. 332 p. (MLRA 7:120)

1. VOSHCHININ, A. I.

2. USSR (600)

4. Building Machinery

7. Dissertation "Regulating rotation moments and speed of turbo-transmission shafts of building construction and road machinery." Izv. AN SSSR. Otd. tekhn. nauk. no. 8, 1952

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

VOSCHCHININ, A.I.

Prevention of machinery overloading by means of fluid coupling.
Trudy Sem.teor.mash. 13 no.51:33-53 '53. (MURA 7:1)
(Power transmission) (Hydraulic machinery)

VOSICHININ, A. I.

PA 3 T20

USSR/Engineering
Winches

Sep/Oct 1946

"Contemporary Mechanical Winches," A. I. Voschchinin,
Candidate in Technical Sciences, 6½ pp

"Mekhanizatsiya Stroitel'stva" No 9/10

Discusses various types of winches and method of
classification, i.e., friction type, two-drum type,
etc. Explains the operation of the Soviet OKB-2-04,
the S-188, etc. Mentions some particular uses to
which these mechanized winches can be put, such as
for operating provisional elevators, and some special
adaptions of the winch, such as power take-off from
trucks.

LC

38r20

VOSHCHININ, A. I., doktor tekhn. nauk

Analysis of and outlook for future development of turbo-
transmissions building machines. Sbor. trud. MISI no. 39:
350-354 '61. (MIRA 16:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut stroitel'mogo
i dorozhnogo mashinostroyeniya.

(Gearing)
(Building machinery—Equipment and supplies)

VOSHCHININ, A.I.; SAVIN, I.F.

[Hydraulic and pneumatic systems of construction and road machinery] Gidravlicheskie i pnevmaticheskie ustroistva na stroitel'nykh i dorozhnykh mashinakh. Moskva, Mashino-stroenie, 1965. 451 p. (MIRA 18:4)

VOSHCHININ, A.P., inzhener.

Simplified method for calculating leakage of earth dams. Gidr.stroi.
26 no. 8:34-36 Ag '57. (MIRA 10:10)

(Dams)

VOSHCHININ, A.P., inzh.

Method of seepage calculations in designing earth dams. Trudy
Gidroproekta 2:57-77 '59. (MIRA 13:7)

1. Nauchno-issledovatel'skiy sektor Vsesoyuznogo proyektno-
izyskatel'skogo i nauchno-issledovatel'skogo instituta
"Gidroproyekt" im. S.Ia.Zhuk.
(Dams) (Soil percolation)

VOSCHCHININ, A.P., inzh.; OGURTSOV, A.I., kand.tekhn.nauk; SEVAST'YANOV, V.I.,
1nzh.

Filling rock embankments with sand by hydraulic methods. Gidr.stroi.31
no.2:27-31 F '61. (MIRA 14:3)
(Dams)

ANDON'YEV, V.L.; BAUM, V.A.; BAUMGARTEN, N.K.; BEREZIN, V.D.; BIRYUKOV, I.K.;
BIRYUKOV, S.M.; BLOKHIN, S.I.; BOROVOY, G.A.; BULAV, M.Z.; BURAKOV,
N.A.; VERTSAYZER, B.A.; VOVK, G.M.; VORMAN, B.A.; VOSCHETILIN, A.P.;
GALAKTIONOV, V.D., kand. tekhn. nauk; GEMKIN, Ye.M.; GIL'DENBLAT,
Ya.D., kand. tekhn. nauk; GINZBURG, M.M.; GLEBOV, P.S.; GODES, E.G.;
GOHRACHEV, V.N.; GRZHIB, B.V.; GREKULOV, L.P., kand. s.-kh. nauk;
GRODZENSKAYA, I.Ya.; DANILOV, A.G.; DMITRIYEV, I.G.; DMITRIYENKO,
Yu.D.; DOBROKHOTOV, D.D.; DUBININ, L.G.; DUNNOKOV, M.D.; ZHOLIK,
A.P.; ZENKEVICH, D.K.; ZIMAREV, Ye.V.; ZIMASKOV, S.V.; ZUBRIK, K.M.;
KARANOV, I.F.; KNYAZEV, S.N.; KOLEGAYEV, N.M.; KOMAREVSKIY, V.T.;
KOSENKO, V.P.; KORENISTOV, D.V.; KOSTROV, I.N.; KOTLYARSKIY, D.M.;
KRIVSKIY, M.N.; KUZNETSOV, A.Ya.; LAGAR'KOV, N.I.; LGALOV, V.G.;
LIKHACHEV, V.P.; LOGUNOV, P.I.; MATSKENICH, K.F.; MEL'NICHENKO,
K.I.; MENDALEVICH, I.R.; MIKHAYLOV, A.V., kand. tekhn. nauk;
MUSIYEEVA, R.N.; NATANSON, A.V.; NIKITIN, M.V.; OVES, I.S.;
OGUL'NIK, G.R.; OSIPOV, A.D.; OSMER, N.A.; PETROV, V.I.; PARYSHKIN,
G.A., prof.; P'YANKOVA, Ye.V.; RAPOORT, Ya.D.; REHMZOV, N.P.;
ROZANOV, M.P., kand. biol. nauk; ROCHEGOV, A.G.; RUBINCHIK, A.M.;
RYBCHENSKIY, V.S.; SADCHIKOV, A.V.; SEMENTSOV, V.A.; SIDENKO, P.M.;
SINYAVSKAYA, V.T.; SITAROVA, M.N.; SOSNOVIKOV, K.S.; STAVITSKIY,
Ye.A.; STOLYAROV, B.P. [deceased]; SUDZILOVSKIY, A.O.; SYRTSOVA,
Ye.D., kand. tekhn. nauk; FILIPPSKIY, V.P.; KHALTURIN, A.D.;
TSISHEVSKIY, P.M.; CHERKASOV, M.I.; CHERNYSHEV, A.A.; CHUSOVITIN,
N.A.; SHESTOPAL, A.O.; SHEKHTER, P.A.; SHISHKO, G.A.; SHCHERBINA,
I.N.; ENGEL', F.F.; YAKOBSON, A.G.; YAKUBOV, P.A., ARKHANGEL'SKIY,

(Continued on next card)

ANDON'YEV, V.L.... (continued) Card 2.

Ye.A., retsenzent, red.; AKHUTIN, A.N., retsenzent, red.; BALASHOV,
Yu.S., retsenzent, red.; BARABANOV, V.A., retsenzent, red.; BATUMER,
P.D., retsenzent, red.; BORODIN, P.V., kand. tekhn. nauk, retsenzent,
red.; VALUTSKIY, I.I., kand. tekhn. nauk, retsenzent, red.;
GRIGOR'YEV, V.M., kand. tekhn. nauk, retsenzent, red.; GUBIN, M.F.,
retsenzent, red.; GUDAYEV, I.N., retsenzent, red.; YERMOLOV, A.I.,
red.; KRITSKIY, S.N., doktor tekhn. nauk, retsenzent, red.; LIKIN,
V.V., retsenzent, red.; IUKIN, V.V., retsenzent, red.; LUSKIN, Z.D.,
retsenzent, red.; MATRIROSOV, A.Kh., retsenzent, red.; MENDELEYEV,
D.M., retsenzent, red.; MENKEL', M.F., doktor tekhn. nauk, retsenzent,
red.; OBRZEZKOV, S.S., retsenzent, red.; PETRASHEN', P.N., retsenzent,
red.; POLYAKOV, L.M., retsenzent, red.; RUMYANTS'EV, A.M., retsenzent,
red.; RYABCHIKOV, Ye.I., retsenzent, red.; STASENKOV, N.G., retsen-
zent, red.; TAKANAYEV, P.F., retsenzent, red.; TARANOVSKIY, S.V.,
prof., doktor tekhn. nauk, retsenzent, red.; TIZIDEL', R.R., retsen-
zent, red.; FEDOROV, Ye.M., retsenzent, red.; SHEVYAKOV, M.N.,
retsenzent, red.; SHMAKOV, M.I., retsenzent, red.; ZHUK, S.Ya.
[deceased], akademik, glavnnyy red.; HUSSO, G.A., kand. tekhn. nauk,
red.; FILIMONOV, N.A., red.; VOLKOV, L.N., red.; GRISHIN, M.M., red.;
ZHURIN, V.D., prof., doktor tekhn. nauk, red.; KOSTROV, I.N., red.;
LIKHACHEV, V.P., red.; MEDVEDEV, V.M., kand. tekhn. nauk, red.;
MIKHAYLOV, A.V., kand. tekhn. nauk, red.; PETROV, G.D., red.; RAZIN,
N.V., red.; SOBOLEV, V.P., red.; FERINGER, B.P., red.; FREYGOFFER,

(Continued on next card)

ANDON'YEV, V.L.... (continued) Card 3.

Ye.F., red.; TSYPLAKOV, V.D. [deceased], red.; KORABLINOV, P.N.,
tekhn. red.; GENKIN, Ye.M., tekhn. red.; KACHEROVSKIY, N.V., tekhn.
red.

[Volga-Don; technical account of the construction of the V.I. Lenin
Volga-Don Navigation Canal, the Tsimlyansk Hydroelectric Center,
and irrigation systems] Volgo-Don; tekhnicheskii otchet o stroitel'-
stve Volgo-Donskogo sudokhodnogo kanala imeni V.I. Lenina, TSim-
lyanskogo gidrouzla i orositel'nykh sooruzhenii, 1949-1952; v piati
tomakh. Moskva, Gos. energ. izd-vo. Vol.1. [General structural
descriptions] Obshchee opisanie sooruzhenii. Glav. red. S.IA. Zhuk.
Red. toma M.M. Grishin. 1957. 319 p. Vol.2. [Organization of con-
struction. Specialized operations in hydraulic engineering] Orga-
nizatsiia stroitel'stva. Spetsial'nye gidrotekhnicheskie raboty.

(Continued on next card)

ANDON'YEV, V.L.... (continued) Card 4.

Glav. red. S. IA. Zhuk. Red. toma I. N. Kostrov. 1958. 319 p.

(MIRA 11:9)

1. Russiia (1923- U.S.S.R.) Ministerstvo elektrostantsii. Byuro
tekhnicheskogo otcheta o stroitel'stve Volgo-Dona. 2. Chlen-kor-
respondent Akademii nauk SSSR (for Akhutin). 3. Deystvitel'nyy
chlen Akademii stroitel'stva i arkhitektury SSSR (for Grishin,
Razin).

(Volga Don Canal--Hydraulic engineering)

PA 19/49T49

USER/Engineering
Dams
Mathematics, Applied

Nov/Dec 48

"Design of Homogeneous Earthen Dams, Constructed
on a Permeable Foundation," A. P. Voshchinin,
Moscow, 8 pp

"Priklad Matemat i Mekh" Vol XIII, No 6

Discusses solutions of filtration problems a-
rising in the design of homogeneous earthen
dams with permeable foundations of any depth.
Submitted 6 Jun 41.

FDB

19/49T49

AMR

Soil Mechanics,
Seepage 31

MS. A. P. Venchtein, "Design of homogeneous earth dams built on pervious foundations," (in Russian), Appl. Math. Mech. (Zh. Mat. Mekh.), Nov.-Dec. 1949, v. 13, pp. 711-714.

The paper presents a mathematical analysis of two-dimensional seepage through a homogeneous earth dam provided with a rock toe and built on a pervious foundation of the same permeability as the dam. The pervious foundation is underlaid by an impervious material.

The solution is obtained in terms of elliptic and hyperbolic functions by means of conformal representation by the method of Keldysh. Mathematical difficulties require two simplifications of the actual boundary conditions: the upper surface of the foundation upstream of the dam is taken at the water level, and the straight horizontal boundary of the impervious layer is replaced by a curved one. The error introduced by these changes is shown to be small when the thickness of the pervious layer is several times greater than the head. Two numerical examples are given.

A. I. Freudenthal, URA

AP-15A METALLURGICAL LITERATURE CLASSIFICATION

E2-1-2-1

VOLUME NUMBER

SERIAL NUMBER

ISSUED

E2-1-2-1

VOSHCHININ, L.I., doktor tekhn. nauk, prof., otv. red. vypuska

[Hydraulic drive] Gidroprivod. Moskva, Izd-vo AN SSSR.
Pt.1.[Hydrodynamic transmissions (basic concepts, elements of hydrodynamic transmissions, hydraulic couplings, hydrodynamic torque converters): Terminology] Gidrodinamicheskie peredachi (osnovnye poniatia, elementy gidrodinamicheskikh peredach, gidrodinamicheskie mufty, gidrodinamicheskie transformatory): Terminologija. 1963. 24 p. (Sbornik rekommenduyemykh terminov, no.63) (MIRA 16:11)

1. Akademija nauk SSSR. Komitet nauchno-tehnicheskoy terminologii.
(Oil hydraulic machinery)

VOSHCHININ, N.P., kand.tekhn.nauk

Prospects for the development of tamping machines for
soil compaction. Stroi. i dor. mash. 7 no.8:4-7 Ag '62.
(MIRA 15:9)
(Soil stabilization)

VOSHCHININ, N.P., kandidat tekhnicheskikh nauk.

Selecting basic parameters for the working parts of tamping machines
for soil consolidation. Strei. i der. mashinestr. no. 7:10-13 Jl '56.
(Soil stabilization) (MLRA 9:10)

BROMBERG, Avraam Aleksandrovich, prof.; BALOVNEV, Vladlen Ivanovich, kand. tekhn. nauk; VOSHCHEININ, Nikolay Petrovich, kand. tekhn. nauk; PIKOVSKIY, Yakov Moiseyevich, kand. tekhn. nauk; POLOSIN-NIKITIN, Serafin Mikhaylovich, kand. tekhn. nauk; SHARTS, Ariy Zel'manovich, inzh.; ANDROSOV, A.A., kand. tekhn. nauk, retsenzent; VASIL'YEV, A.A., inzh., retsenzent; IONOV, P.M., inzh., red.; TIKHANOV, A.Ya., tekhn. red.

[Road machinery; an atlas of designs] Dorozhnye mashiny; atlas konstruktsii. Pod red. A.A.Bromberga. Izd.2., perer. i dop. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1960. 153 p.

(MIRA 14:6)

(Road machinery)

VOSCHININ, N.P., inzh.; BOBYLEV, L.M., inzh.; CRUOV, Ye.V., inzh.

Effect of the parameters of tamping slabs on the process of compacting soils. Transp. stroi. 14 no.7:39-41 J1 '64.

(MIRA 18:1)

PIKOVSKIY, Yakov Moiseyevich, dotsent, kand.tekhn.nauk; POLOGIN-NIKITIN,
Serafim Mikhaylovich, dotsent, kand.tekhn.nauk; YOSHCHININ,
Nikolay Petrovich, dotsent, kand.tekhn.nauk; BALOVLEV, Vladlen
Ivanovich, dotsent, kand.tekhn.nauk; ANDROSOV, A.A., kand.tekhn.
nauk, retsentent; NIKITIN, A.G., inzh., red.; CHERNOVA, Z.I.,
tekhn.red.

[Road machinery and equipment; machinery and plants for making
pavements] Dorozhnye mashiny i oborudovanie; mashiny i zavody
dlia postroiki dorozhnykh pokrytii. Pod obshchei red. I.A.M.
Pikovskogo. Moskva, Gos.sachno-tekhn.izd-vo mashinostroit.lit-ry,
1960. 604 p. (MIRA 14:1)

(Road machinery) (Mixing machinery)

VOSHOHININ, N.P., kand. tekhn. nauk.; DIDUKH, B.I., insh.

Machine for tamping the bottoms and slopes of canals. Stroi. i
dor. mashinostr. 4 no.11:20-21 N '59 (MIRA 13:3)
(Canals) (Soil stabilization)

BROMBERG, Avraam Aleksandrovich, prof.; YOSHCHININ, Nikolay Petrovich, kand.tekhn.nauk; PIKOVSKIY, Iakov Moiseyevich, kand.tekhn. nauk; POLOSIN-HIKITIN, Serafim Mikhaylovich, kand.tekhn.nauk; SHARTS, Ariy Zel'manovich, inzh.. Prinimal uchastiye: BALOVNEV, V.I., kand.tekhn.nauk. ALFEROV, K.V., prof., doktor tekhn. nauk, retsenzent; NEMIROVSKIY, E.I., inzh., retsenzent; IONOV, P.M., inzh., red.; TIKHANOV, A.Ya., tekhn.red.

[Earthmoving machinery; atlas of designs] Mashiny dlia zemlianykh rabot; atlas konstruktsii. Pod red. A.A.Bromberga. Izd.2., perer. i dop. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1959. 154 p. (MIRA 13:1)

1. Moskovskiy institut inzhenerov zhelezodorozhного transporta imeni I.V.Stalina (for Alferov). 2. Vsesoyuznyy nauchno-issledovatel'skiy institut stroitel'nogo i dorozhnogo mashinostroyeniya (VNIIStroydormash) (for Nemirovskiy).

(Earthmoving machinery--Design)

VOSHCHININ, P.A. : NESTERENKO, G.A.

Introduction of forage plants from the flora of the U.S.S.R.
and the establishment of regions for the use of particular
perennial grasses in cultivated pastures and hay fields. Trudy
Bot. inst. Ser. 6 no. 7:178-182 '59. (MIRA 13:4)

1. Vsesoyusnyy nauchno-issledovatel'skiy institut kormov im.
V.P.Vil'yamsa, Lugovaya.
(Pastures and meadows)

VOSHCHININ, P.A., kand. sel'khoz.nauk; GRINCHUK, I.M., inzh.;
ZHURAVLEV, A.A., kand. sel'khoz. nauk; KARAVYANSKIY,
N.S., kand. sel'khoz. nauk; SHAIN, S.S., doktor sel'-
khoz. nauk, prof.[deceased]; YATSUK, Ye.P., kand. tekhn.
nauk; ANTONOVA, M.M., red.; GINZBURG, A.S., tekhn.red..
KOBYAKOVA, G.N., tekhn. red.

[Seed production of meadow grasses] Semenovodstvo lugovykh
trav. [By] P.A.Voshchinin i dr. Moskva, Sel'khozizdat,
1963. 151 p. (MIRA 17:4)

VOSHCHININ, P. A.

Semenovodstvo lugopastbishchnykh trav Seed culture of meadow and pasture grasses.
Moskva, Sel'khozgiz, 1951. 56 p.

SO: Monthly List of Russian Accessions, Vol 6 No 4, July 1953

1. VOSNCHINTIN, P. A.

2. USSR (600)

4. Agriculture

7. Seed culture of meadow and pasture grasses. Moskva, Sel'khozgiz, 1951.

9. Monthly List of Russian Accessions, Library of Congress, April 1953. Unclassified.

VOSHCHININ, V. A.

OVCHINSIKOV, S. M. AND VOSHCHININ, V. A. Employing Freezing macrotome without the use of carbon dioxide.

So: Veterinariya; 23; (12); December 1946; Uncl.
TABCON

VOSHCHININ, V.P.

VOSHCHININ, V.P. Kazakstan. Leningrad, Gosizdat, 1929. 90 p.
(Ekonomicheskaja geografiia SSSR po raionam).

"Spisok osnovnoi ispol'zovannoj literatury i statisticheskikh materialov": p. 89-90.
DLC: HC487.K3V6

SO: LC, Soviet Geography, Part II, 1951/Unclassified.

VOSHCHININ, Viktor Vasil'yevich

Designing-Engineering

Order of Mark of Honor

Soviet Source: N: Red Fleet #176, 29 July 47, Moscow

Abstracted in USAF "Treasure Island", on file in Library of Congress, Air Information Division, Report No. 30385.

Fractional determination of chlorate, bromate and iodate ions. N. A. Taraneev and M. S. Voschchinskaya. *J. Applied Chem. (U. S. S. R.)* 10, 1118-21 (in French) (1937).—The detection of the above ions in the presence of Cl, Br, I and SO₄ ions was investigated. (a) Treat 5 cc. of sample with 1 N AgNO₃ while shaking and cooling, until complete pptn., add 1-2 cc. more, decant or filter, add to the filtrate Zn dust, 1-2 cc. of H₂SO₄ (1:1), shake, allow to stay for a min., add 3-4 cc. of concd HNO₃ and boil until a gray ppt. of Ag dissolves and forms a white AgCl ppt. Wash the ppt. 3 times with cold water, add a smid. KIO₃ soln. (0.5 cc. at time) until no white ppt. forms, add 3-4 cc. in excess, boil for 1 min., decant the soln., add to the decantate 2-3 cc. of HNO₃ (1:1) and 1 cc. of satd. Na₂NO₃, and boil for 2 min. The formation of the brown ppt. of MnO₂ (HgMn₂) shows the presence of Br or I. (b) Add 8 cc. of satd. NaCl soln. to 5 cc. of the sample and one drop of concd. alkali. Boil for a min., filter and wash the ppt. twice with boiling water. Dissolve the ppt. in 2-3 cc. of hot 4 N HCl, add 1 cc. of 7 N H₂SO₄ and 2 cc. of 0.8 N NaCNS. A yellow or reddish brown color, depending on the amt. of septl. I, indicates the presence of I₃ ion in the sample. A. A. P.

AMERICAN METALLURGICAL LITERATURE CLASSIFICATION

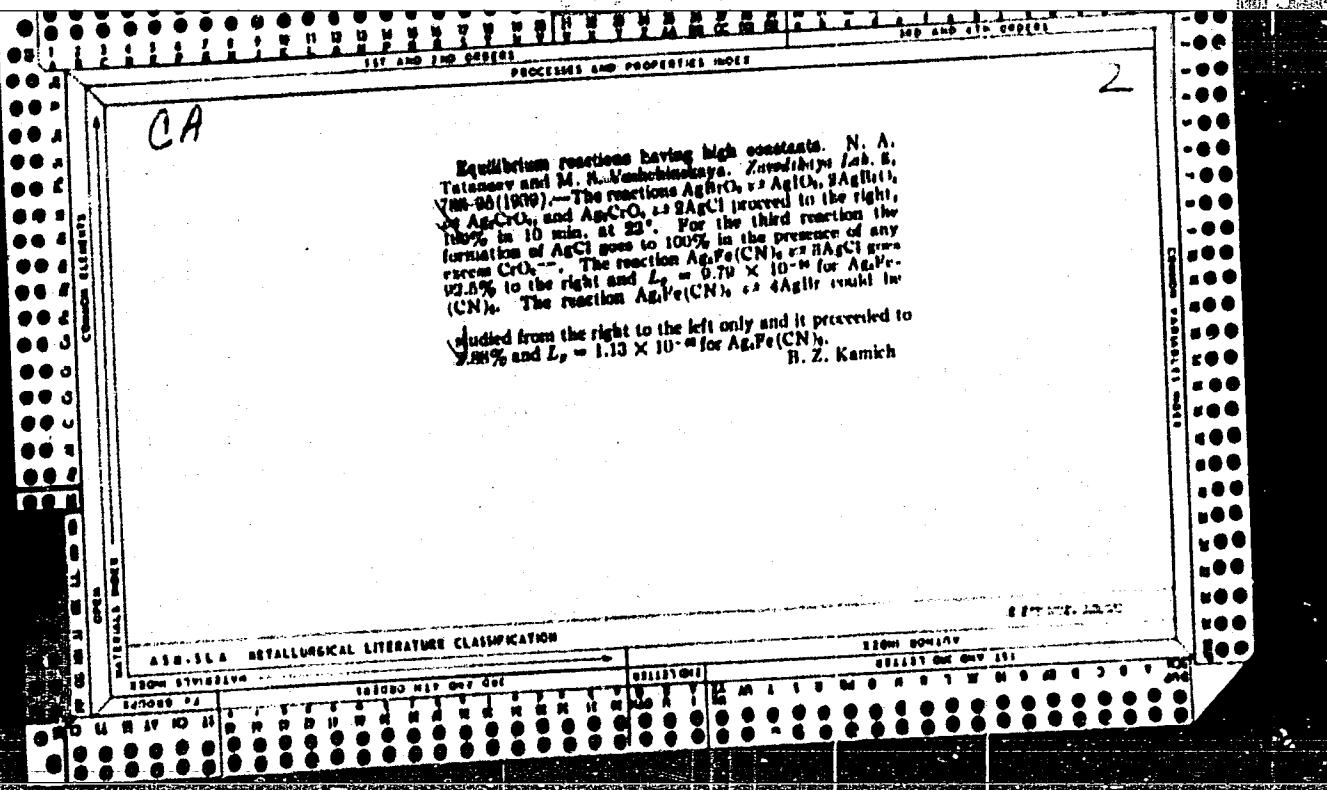
APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001861020009-4"

Ca

✓ Volumetric determination of chlorine by the Volhard Method after a preliminary reduction with zinc in acid solution to chloride. N. A. Tsanasev and M. N. Vindchukhayer. *J. Applied Chem.* (U. S. S. R.) 11, 1262 (in French) (1938). Add 50 cc. of approx. 0.1 N chloride with ZnO dust and 5 cc. of concd. H_2SO_4 . Shake for 5 min. Add to 100 cc. Filter through a dry filter, rejecting the first 5 cc. To 50 cc. of the filtrate add 50 cc. of 0.1 N AgNO_3 . Shake until the ppt. settles. Add 2 cc. of triclor alum soln. and titrate slowly with 0.1 N KCN soln. (or NH_4CNS). The accuracy of the method is 0.28%. A. A. Podgorny

7



KHODAKOVA, W.I.; ABRAMOVA, I.G.; VOSKOBINSKAYA, N.P.

Some data for the study of diphyilobothriasis in Turukhansk
and Igarka Districts of Krasnoyarsk Territory. Med. paraz. i
paraz. bol. 34 no.2:139-145 Mr-t p '65. (MKA 13:11)

1. Gel'mintologicheskiy etdel Instituta meditsinskoy parazitologii i tropicheskoy meditsiny imeni Ye.I. Martsinovskogo
Ministerstva zdravookhraneniya SSSR i krayevnyya sanitarno-epidemiologicheskaya stantsiya Kraanoyarska.

VOSHCHINSKAYA, N.V.

Voshchinskaya, N.V. -- "Synatropic Flies and Development of Measures for Controlling Them Under Ecological Conditions of the Armenian SSR." Cand Biol Sci, Department of Biological Sciences, Acad Sci Armenian SSR, 15 Jan 54. (Kommunist (Yerevan), 10 Jan 54)

SO: SUM 168, 22 July 1954

L 03011-67 FWT(d)/FWT(m)/FWP(v)/T/FWP(t) FWT/ENP(k)/ENP(h)/ENP(1) ^(P/C)
ACC NR: AP6023435 JD/HM SOURCE CODE: UR/0135/66/000/007/0001/0003

AUTHOR: Baranov, M. S. (Candidate of technical sciences); Afanas'yev, V. N. (Engineer); Voshchinskij, M. I. (Engineer); Vaynshteyn, R. M. (Engineer); Nedel'chik, E. V. (Engineer); Taganov, Yu. I. (Engineer); Geynrikhs, I. N. (Engineer)

ORG: All-Union Extramural Machine Building Institute (Vsesoyuznyy zaochnyy mashinostroitel'nyy institut)

TITLE: Laser welding of some metals ⁴

SOURCE: Svarochnoye proizvodstvo, no. 7, 1966, 1-3

TOPIC TAGS: laser application, laser welding / SU-1 laser welder, 1Kh18N9T steel, K0 steel

ABSTRACT: The results of laser welding of fillet joints of copper and L-62 silver coated brass with 1Kh18N9T steel, K0 steel and copper are presented. The SU-1 laser welder (shown in photograph) was used to weld thin wires [$d < 0.1$ mm] attached to semiconductive and microelectronic devices. The unit power input is regulated by adjusting various object lenses with focal distances of 10, 20, 40, and 50 mm. Unit power input is calculated by the formula $g = W^2/tF$ where W^2 is the energy of radiation considering the losses in the optic system in joules; t is the pulse time in sec and F is the focal area in cm^2 . The weld penetration and width are proportional to the maximum volt-

UDC: 621.791.72:535.14:669.15-194

Card 1/2

L 03011-67.

ACC NR: AP6023435

6 7

age of the condenser battery. This relationship is shown in a table for USA steel where focal distance is 20 mm. Another test was carried out on strips of USA steel with a thickness of 2.6 mm (surface condition of the 10th class in accordance with GOST 2789-59) in order to determine the relationship between width and penetration of the welds and the defocusing. These tests showed that when $\Delta f = 0.75$, the weld penetration was max $h = 22 \mu$. Overlap welding was carried out on copper with L-62 brass, with non-coated brass, 1Kh18N9T stainless steel, K0 low-carbon steel and finally on copper, wires. Without stripping the insulation [M1] copper wire of $d = 0.05$ mm was welded to a silver-coated brass rod of $d = 0.5$ mm. Neither of these specimens showed cracks in the welds. However, microporosity was indicated in some of the specimens. Shear strength tests of the welds were carried out on two types of welds: without stripping the insulation from the copper wire and with bare wire. The first specimens had an average shear strength of 25.3 kg/mm^2 while for the second type, a shear strength of 26 kg/mm^2 . The small difference makes it feasible to recommend this welding process without stripping the insulation. A comparative test of the laser-welded and brassed joints was made. The latter showed an average strength 13% less than the welded joints. The authors conclude that the laser-welded joints have considerably better mechanical properties than the soldered joints. This is due to the smaller heat-affected zone. Orig. art. has: 6 figures, 1 table.

SUB CODE: 13,20/ SUBM DATE: none

Joining of dissimilar metals 18

Card 2/2 AWM

VOSHCHANOV, K. P.

USSR/Metallurgy - Welding, Caustic
Embrittlement

Jul 52

233T42 "Welding Up the Cracks Caused by Caustic Embrittlement in Drums of Steam Boilers" K. P. Voshchanov, PA Engr, Cen Exptl Welding Shop of Glavkislorod

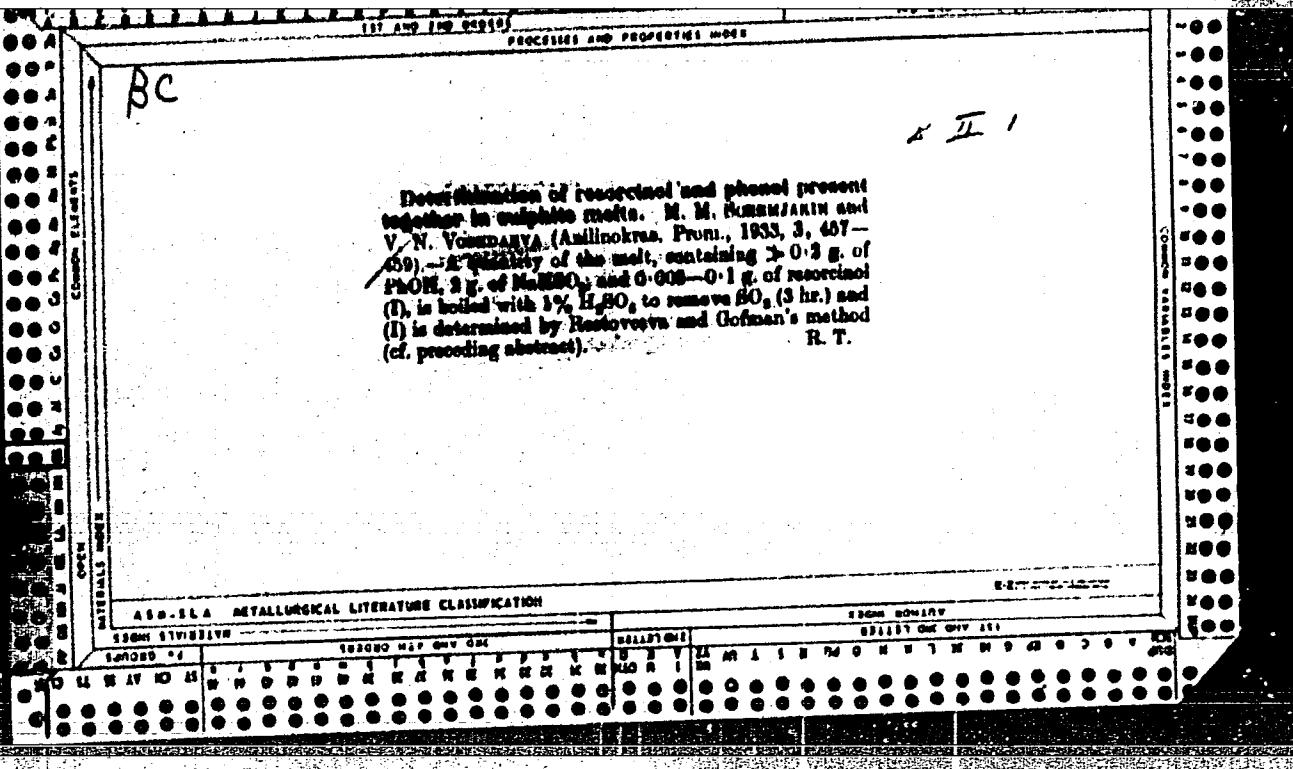
"Artogen Delo" No 7, pp 21-23

Discusses development of cracks in riveted joints and outlines methods for repairing damaged equipment. Describes expts for welding up caustic embrittlement cracks in all-forged or all-welded drums of high-pressure boilers. Concludes that this type of boiler may be repaired by welding. Preliminary removal of

233T42

all damaged portions of plate is required for obtaining good results. Insert has to be welded in when vol of damaged metal is large.

233T42



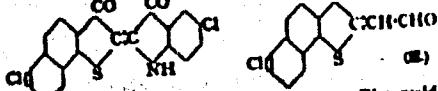
VOSHDAEVA, V. N.,
R. K. EICHMAN, (Anilinokras. Prom., 1934, 4, 523-531)

VOSHDEEVA, V. N.,
R. K. EICHMAN, (Anilinokras. Prom., 1934, 4, 461-472)

Bc

B-2-4

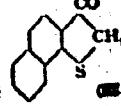
Indigo-dye Dk. L. V. N. Voshchiva (J. Appl. Chem. Russ., 1940, 12, 1628-1629).—The commercial dye contains



74% of impurities having no dyeing power. The residue consists of <3 dyes, of which one dye is present in traces

only and is not, in CO₂. The other yields a blue dye when oxidized and has the empirical formula C₁₀H₈O₂NHCl (I).

Hydrolysis of this dye with KOH in EtOH affords 2-chlorothiophenoic acid and a substance, C₉H₇O₂ClS, m.p. 197-197.5° (decomp.), to which the structure (III) is assigned. Condensation of butia with the substance of structure (III) gives a dye having an absorption spectrum identical with that of the product of catalytic dechlorination of (I).



ASH-ILA METALLURGICAL LITERATURE CLASSIFICATION

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VOSHEDCHENKO, B. M.

Category : USSR/Solid State Physics - Mechanical Properties of Crystals and
Polycrystalline Compounds E-9

Also listed : Prof. Zhur - Flotkin, No. p. 1957 No 3010

Card : 1/1

KONTOROVICH, I.Ye., doktor tekhnicheskikh nauk, professor; VOSKEDCHENKO,
B.M., kandidat tekhnicheskikh nauk.

Role of microstructure in the physical characteristics of brittleness. Metalloved. i obr.met. no.1:35-37 Ja '57. (MLRA 10:2)

1. Moskovskiy aviatcionnyy tekhnologicheskiy institut.
(Steel, Structural--Metallography)
(Steel--Brittleness)